



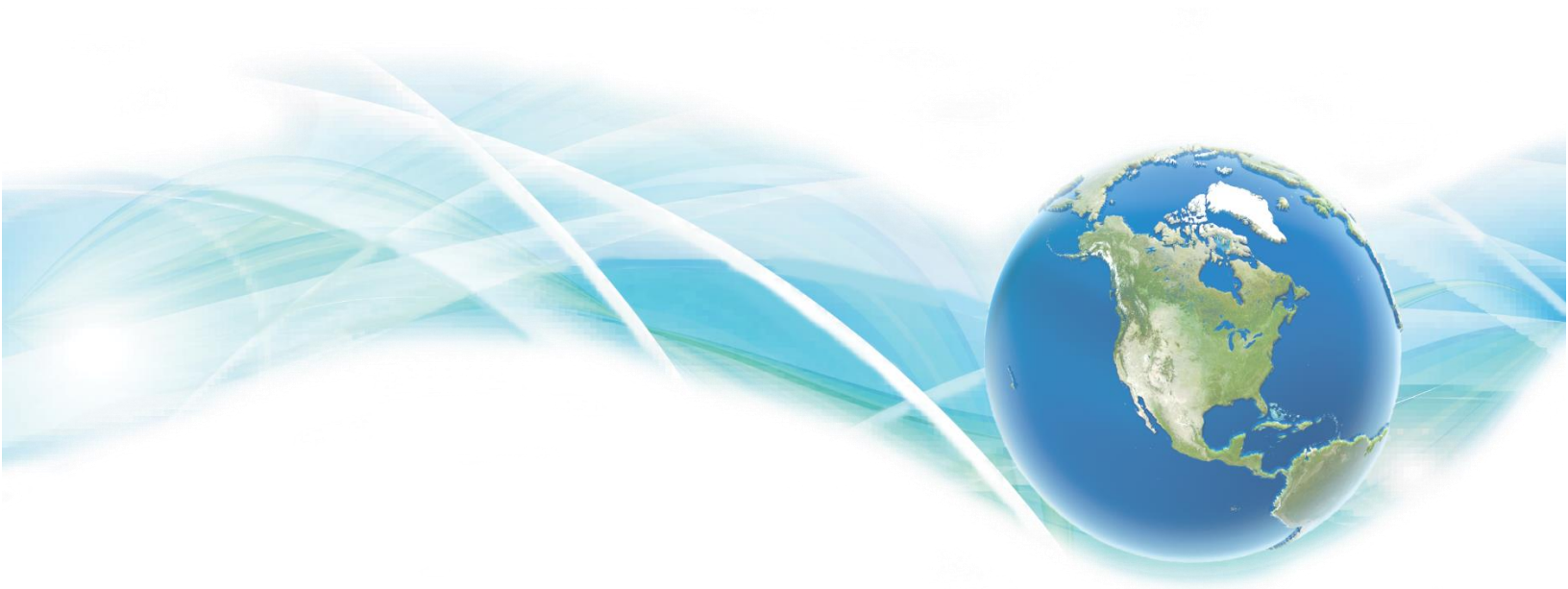
Theme Implementation Plan for the Address Theme

Activity Report for Fiscal Year 2019

U.S. Census Bureau

Federal Geographic Data Committee (FGDC)

October 31, 2019



Address Theme FY 2019 Implementation Plan FY19 Activity Report

Overview

As part of meeting the requirements under [OMB Circular A-16 Supplemental Guidance](#) and [OMB Circular A-16 Appendix E - NGDA Data Themes, Definitions, and Lead Agencies](#) for NGDA Portfolio Management and NGDA Theme Management, NGDA Themes Leads for a Theme, in coordination with associated NGDA Dataset Managers, have developed Theme Strategic Plans and corresponding implementation plans for each Theme in the NGDA Portfolio. This report provides information on implementing the goals, objectives, and actions outlined in the Theme's Strategic Plan (link below). The report includes information on Theme Personnel (Table 1), National Geospatial Data Asset (NGDA) datasets associated with the Theme (Table 2), and the human and financial resources needed to manage the Theme (Table 3).

Theme Strategic Plan

https://communities.geoplatform.gov/ngda-portfolio/wp-content/uploads/2019/2019_Reports/Address_Theme_Strategic_Plan_2019_2021.pdf

Theme Personnel

Theme personnel play a vital role in the operation and maintenance of a Theme. They are "individuals who provide interdepartmental leadership and coordination at the NGDA Theme level. They work with component NGDA Dataset Managers to develop standards and provide guidance. The NGDA Theme Lead, or designee, chairs the NGDA Theme's Thematic Committee and manages the annual process of providing NGDA Dataset collaboration and funding recommendations to the FGDC Steering Committee for those NGDA Datasets within their NGDA Theme. Additionally, the NGDA Theme Lead reports to the Executive NGDA Theme Champion and the FGDC Coordination Group on the NGDA Theme's activities and investments (both current and planned)." Table 1 provides a summary of current Theme Personnel followed by Table 2 that lists the NGDA Datasets that comprise the Theme.

Theme Personnel	
Theme Leads:	Lynda Liptrap (U.S. Census Bureau), Steve Lewis (Department of Transportation)
Theme Lead Agencies:	Department of Commerce (DOC), Department of Transportation (DOT)
Executive Theme Champions:	Deirdre Bishop (U.S. Census Bureau), Daniel Morgan (DOT)
Executive Champion Agencies:	U.S. Census Bureau, DOT

Table 1. Personnel Involved in Theme Management

Address Theme NGDA Datasets	NGDA Agency
National Address Database (NAD)	DOT

Table 2. NGDA Datasets within the Theme

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Human and Financial Resources Needed for Theme Management

The following table provides an estimate of resources needed for managing this Theme. It includes different activities, the roles that support them, as well as an estimated decimal Full Time Equivalent (FTE) and FTE grade. This estimate does not include the resources required for the agency to develop and maintain the NGDA Dataset(s) that make up the Theme to meet the agency's core mission requirements.

Reporting Period for Human and Financial Resources: October 2018 – September 2019

Description of Theme Management Activities	Role	FTE ¹	FTE Grade
A-16 NGDA Theme management (e.g., lead and attend meetings, review NGDA documents, develop Theme Strategic & Implementation Plans, etc.)	Theme Leads	.3	GS-15
		.6	GS-14
A-16 NGDA Theme management	Theme Lead Support Staff	.25	GS-14
		.13	GS-13
		.65	GS-12
Theme Administration Total		1.93	

Table 3. Human and Financial Resources Needed for Theme Management

Progress against Goals and Objectives

The following table shows the progress status made toward achieving the Theme's Strategic Plan goals and objectives since the last reporting period. Status categories include 'Not Started' for those activities that have not gotten underway in the reporting period; 'In Progress' for those activities underway, which will continue into the next year; 'Complete' for the activities finished, or 'Recurring (completed for the current reporting period).

Goals and Objectives undertaken during FY19	Status
Goal 1: Ensure the effective development of the Address Theme Datasets.	
Objective 1.1: Develop and maintain authoritative address data sets.	In Progress
Objective 1.2: Develop and maintain authoritative address data sets.	In Progress
Objective 1.3: Facilitate address data aggregation at the state and local government level for the NAD.	In Progress

¹ A full-time employee was available a maximum of 2,000 hours during the inclusive period of October 1, 2018 – September 30, 2019 assuming a Monday-Friday schedule with 8-hour workdays and not counting Federal Holidays. The FTE was determined by taking the actual number of hours worked in support of Theme Management divided by 2000 hours, rounded to the nearest 0.01. Column may not sum to total due to rounding.

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Goals and Objectives undertaken during FY19	Status
Goal 2: Facilitate the sharing and distribution of Address Theme datasets.	
Objective 2.1: Ensure metadata are published for Address Theme datasets.	In Progress
Objective 2.2: Ensure map services are published for Address Theme datasets.	In Progress
Goal 3: Coordinate Among the Address Theme Stakeholders.	
Objective 3.1: Collaborate with members of the Address Subcommittee and subgroups.	In Progress
Objective 3.2: Ensure visibility and responsiveness to oversight agencies and advisory committees.	In Progress
Objective 3.3: Engage with stakeholders.	In Progress

Table 4. Theme Implementation Plan Progress Status

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Strategic Goal 1 – Ensure the Effective Development of the Address Theme Datasets.

Objective 1.1: Develop and maintain authoritative address data sets.

Anticipated Outcomes: The Address Theme will consist of authoritative address data. Tribal, state and local governments are typically the authoritative sources for address points representing residential and commercial structures. Federal programs are also potential sources for address related datasets.

Agencies, Bureaus, and Offices Involved: The Theme Leads and Dataset Managers.

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
1.1.1. Add additional and updated data to the NAD as they are made available from state and local partners.	Collect data from all states/counties.	Number of datasets collected.	USDOT	FY21-Q4
	Assess data quality for all incoming data.	Number of datasets assessed for quality.	USDOT	FY21-Q4
	Add data from all incoming data to the NAD.	Number of datasets added to the NAD.	USDOT	FY21-Q4
Agency and/or Stakeholder	Activities Through FY19-Q4			
USDOT	1.1.1 22 States and DC data accepted into the NAD since inception. 1.1.1 2 States data in progress. 1.1.1 4 States data in queue.			

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
1.1.2. Maintain and update the NAD as funding permits.	Quarterly releases of the NAD.	Number of state/county datasets updated.	USDOT	FY21-Q4

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Agency and/or Stakeholder	Activities Through FY19-Q4			
USDOT	1.1.2	Contractor performed quality assurance (QA) and Extract, Transform, and Load (ETL) on Texas, Wisconsin, and Iowa data. While ETL was done for Texas, the data was not included in the NAD due to parsing problems. The contract ended 8/31/19. Work is expected to resume in FY2020.		

Objective 1.2: Provide content required by users of the NAD.

Anticipated Outcomes: The NAD consists of features and attributes that meet user needs and can be provided by partners.

Agencies, Bureaus, and Offices Involved: The Theme Leads and Dataset Managers.

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
1.2.1. Evaluate user requirements for NAD content.	Propose updated minimum and optimal content guidelines for the NAD.	Subcommittee approves updated guidelines.	USDOT Theme Lead and Address Content Subgroup Lead.	FY21-Q4
1.2.2. Work with data providers to determine feasibility of proposed content.	Solicit feedback from providers and revise guidelines based on feedback.	Subcommittee approves updated guidelines.	USDOT Theme Lead and Address Content Subgroup Lead.	FY21-Q3
1.2.3. Publish updated NAD content guidelines.	Publish updated NAD content guidelines.	NAD content guidelines are published on the FGDC Address Theme Community Page.	USDOT Theme Lead and Address Content Subgroup Lead.	FY21-Q4
Agency and/or Stakeholder	Activities Through FY19-Q4			
Address Content Subgroup Lead	1.2.1, 1.2.2 Presented initial recommendations to Address Subcommittee. 1.2.1, 1.2.2 Conducted 23 Address Content Subgroup meetings. 1.2.1, 1.2.2 Submitted 'white paper' to Theme Leads explaining recommendations.			

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Objective 1.3: Facilitate address data aggregation at the state and local government level for the NAD Anticipated Outcomes: High level workflow models are developed that help states establish state-wide data aggregation processes for the NAD. Agencies, Bureaus, and Offices Involved: Theme Leads and Dataset Managers, Address Workflow Subgroup, State Address Data Managers.				
Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
1.3.1. Identify high level categories of data aggregation practices.	Propose data aggregation workflow practices.	Subcommittee approves data aggregation workflow practices.	USDOT Theme Lead and Address Workflow Subgroup Lead	FY19-Q2
1.3.2. Publish workflow models.	Publish data aggregation workflow models.	Workflow models are published on the FGDC Address Theme Community Page.	USDOT Theme Lead and Address Workflow Subgroup Lead	FY20-Q3
Agency and/or Stakeholder	Activities Through FY19-Q4			
Address Workflow Subgroup Lead	1.3.1 Presented high level data aggregation workflow practices for state level aggregators to the Address Subcommittee, May 8, 2019 and the subcommittee concurred with the proposed practices.			

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Strategic Goal 2 – Facilitate the sharing and distribution of Address Theme datasets.

Objective 2.1: Ensure metadata are published for Address Theme Datasets.

Anticipated Outcomes: Address Theme datasets are discoverable through data portals by publication of metadata that documents data content and includes links to access the data.

Agencies, Bureaus, and Offices Involved: The Theme Leads and Dataset Managers.

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
2.1.1. Include NGDA designation keyword tags and NGDA alternate titles in metadata to clearly identify NGDAs within the Address Theme.	Metadata released with NGDA keyword tags.	The NAD is discoverable using NGDA keywords and alternate titles.	USDOT and Census Dataset Manager	FY20-Q4
2.1.2. Ensure the use of the same title in the metadata record and the NGDA Master Dataset List.	Titles match in the metadata record and the NGDA Master Dataset List.	FGDC can track datasets using dataset titles.	USDOT and Census Dataset Manager	FY20-Q4
2.1.3. Provide direct Uniform Resource Locators (URLs) to the data set, online resources, web services, APIs, and additional documentation per FGDC guidelines.	Required URLs are included in the metadata.	The NAD download/online resources, web services, APIs and additional documentation are accessible via URLs in the metadata.	USDOT and Census Dataset Manager	FY20-Q4
2.1.4. Create geospatial metadata in compliance with International Standard Organization (ISO) standards.	Metadata passes validation and is published.	The NAD is discoverable on government data portals.	USDOT and Census Dataset Manager	FY20-Q4

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2.1.5. Include a referencing thumbnail “browse” graphic in dataset metadata where appropriate.	Browse graphics are included in the metadata.	Users can view a snapshot of the data via metadata.	USDOT and Census Dataset Manager	FY20-Q4
Agency and/or Stakeholder		Activities Through FY19-Q4		
USDOT Theme Lead and Census Dataset Manager		2.1.1. Published metadata compliant with FGDC and ISO requirements for NAD v2.0.		

Objective 2.2: Ensure map services are published for Address Theme datasets.

Anticipated Outcomes: NGDA datasets for the Address Theme will be available as web services for efficient consumption and proliferation in web applications.

Agencies, Bureaus, and Offices Involved: The Theme Leads and Dataset Managers.

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
2.2.1. Provide web services for all NGDAs in the Address Theme per FGDC guidelines.	Web services are published and metadata is updated with correct URLs, tags and Service Identification Record.	Web services are available.	USDOT	FY20-Q4
2.2.2. NGDA metadata must include an actionable Service Endpoint URL that will launch a web service. If no actionable Service Endpoint is available, provide the URL that gets the user closest to the web service. As individual services are developed, the metadata link(s) will be updated to the actionable Service Endpoint.	Metadata is published with actionable Service Endpoint URL	Web services are accessible through the dataset metadata record.	USDOT and Census Dataset Manager	FY20-Q4

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2.2.3. In the metadata, URLs will be tagged with the acronym that best represents the service, such as REST, WMS, WFS, etc. per the NGDA Metadata Guidance. ²	URLs are tagged with the correct acronyms.	The service type is known to users.	USDOT and Census Dataset Manager	FY20-Q4
2.2.4. ISO metadata will include a standalone Service Identification Record. This will allow the linking of the metadata of current and future versions of the same dataset to the same Service Identification Record.	ISO metadata includes a standalone Service Identification Record.	Current and future versions of NAD metadata will be linked.	USDOT and Census Dataset Manager	FY20-Q4
Agency and/or Stakeholder	Activities Through FY19-Q4			
Theme Leads, Dataset Manager	2.2.1-2.2.4 USDOT in the process of standing up web services.			

Strategic Goal 3 – Coordinate Among the Geospatial Address Stakeholders.

Objective 3.1: Collaborate with members of the Address Subcommittee and subgroups.

Anticipated Outcomes: The Theme agencies and dataset managers will coordinate address information sharing among tribal, state, and local governments, federal agencies, and private organizations. Forums for the open exchange of information about Address Theme data, such as the Address Theme Community portal on the GeoPlatform, will assure the availability of, and public access to, address data and associated metadata from distributed databases. Outreach to agencies that consume or produce datasets will reduce duplication of effort and will increase the overall quality of shared address data.

Agencies, Bureaus, and Offices Involved: The Theme Leads, the Address Theme Subcommittee and Subgroups

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
3.1.1. Conduct meetings of the Address Subcommittee to provide an open forum for the exchange of ideas to improve the overall management and availability of address datasets.	Meetings are held monthly.	Number of meetings held.	Address Theme Leads	FY21-Q4

² Federal Geographic Data Committee, “National Geospatial Data Assets (NGDA) Metadata Guidelines” (Reston, Virginia, USA, 2016), 5-6.

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3.1.2. Identify collaborative opportunities with tribal, federal, state, county, and local governments regarding consistent address datasets.	Collaboration opportunities area identified.	Number of collaborations identified.	Address Theme Leads	FY21-Q4
3.1.3. Establish subgroups as needed to work on specific topics of interest or activities.	Subgroups are established.	Recommendations made by subgroups.	Address Theme Leads and Subgroup Leads	FY21-Q4
Agency and/or Stakeholder	Activities Through FY19-Q4			
Address Theme Leads, Subgroup Leads	3.1.1 Nine Address Subcommittee meetings held. 3.1.2 Renewed USPS collaboration on ZIP Codes; National States Geographic Information Council (NSGIC) stakeholders participated in subgroups. 3.1.3 Recommendations were made by the Address Content and Workflow Subgroups.			

Objective 3.2: Ensure visibility and responsiveness to oversight agencies and advisory committees.

Anticipated Outcomes: Address Theme Leads and Address Subcommittee chairs report to the FGDC oversight committees such as the Steering Committee and to the National Geospatial Advisory Committee (NGAC).

Agencies, Bureaus, and Offices Involved: The Theme Leads.

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
3.2.1. Initiate opportunities and respond to requests to provide updates on the Address Theme and NAD to the FGDC Steering Committee.	Provide updates to the Steering Committee.	Number of updates provided.	Address Theme Leads	As requested through FY21 Q4
		Number of updates provided.	Address Theme Leads	

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<p>3.2.2. Initiate opportunities and respond to requests to provide updates on the Address Theme and NAD to the FGDC NGAC.</p> <p>3.2.3. Respond to inquiries from the Office of Management and Budget (OMB) and the Government Accountability Office (GAO).</p>	<p>Provide updates to the NGAC.</p> <p>Provide responses to OMB and GAO.</p>	<p>Responses are provided to all inquiries.</p>	<p>Address Theme Leads</p>	<p>As requested through FY21 Q4</p> <p>As requested through FY21 Q4</p>
<p>Agency and/or Stakeholder</p>	<p>Activities Through FY19-Q4</p>			
<p>Address Theme Leads</p>	<p>3.2.1-3.2.2 Provided Address Theme and NAD updates to the NGAC at 3 of 4 meetings.</p> <p>3.2.3 Responded to a GAO inquiry regarding the Census Bureau's Local Update of Census Addresses (LUCA) and the potential role of the NAD.</p>			

Objective 3.3: Engage with stakeholders.

Anticipated Outcomes: Address Theme Leads and Dataset Managers attend conferences and events to engage face to face with stakeholders to promote the theme datasets and theme related activities.

Agencies, Bureaus, and Offices Involved: The Theme Leads and Dataset Managers.

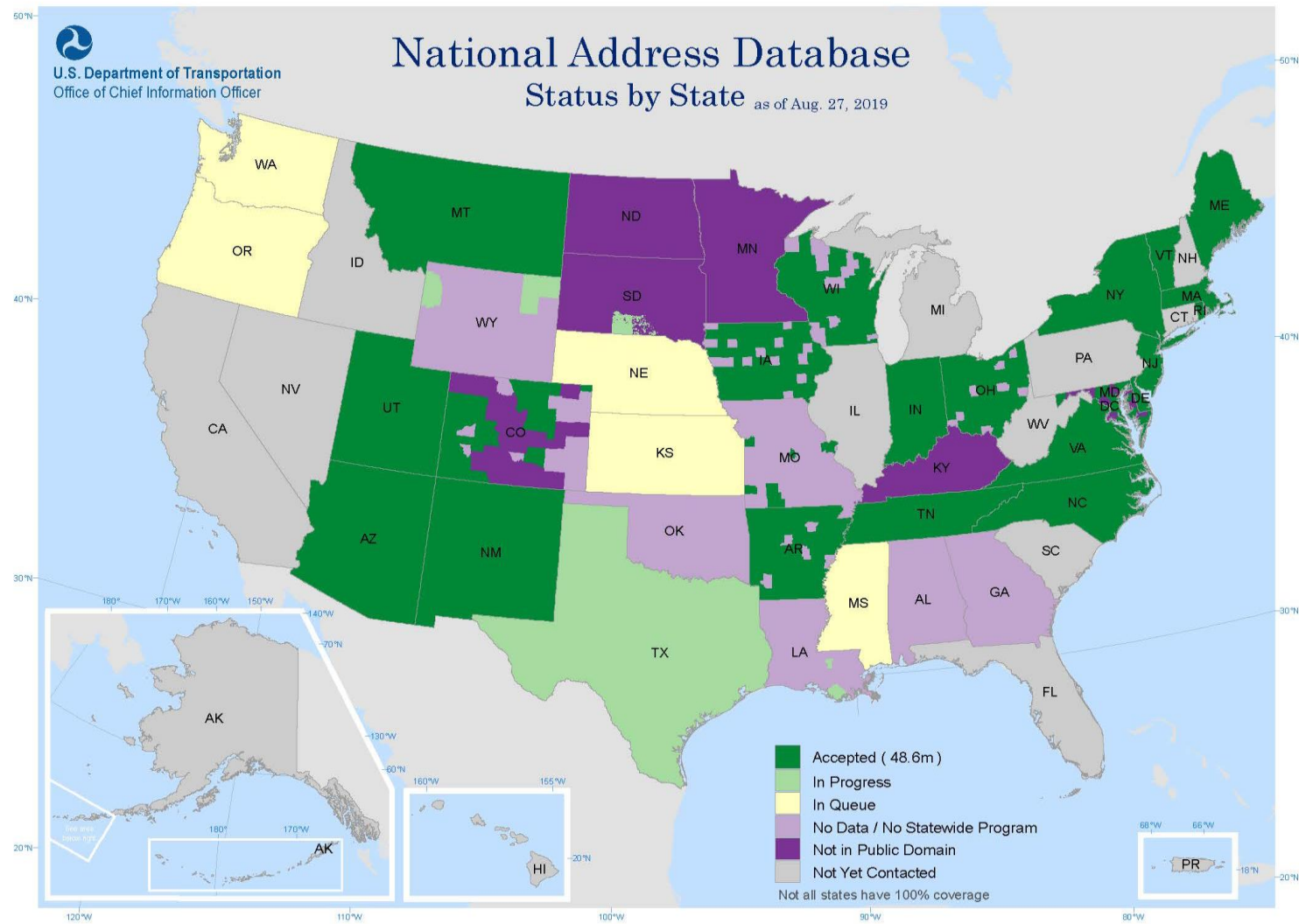
Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date (FY)
<p>3.3.1. Identify target audiences and their key events.</p>	<p>Audiences and events are identified.</p>	<p>Number of target audiences and events identified.</p>	<p>Address Theme Leads</p>	<p>FY21-Q4</p>
<p>3.3.2. Prepare presentations and other promotional and informational materials.</p>	<p>Presentations and materials</p>	<p>Number of presentations and materials published.</p>	<p>Address Theme Leads</p>	<p>FY21-Q4</p>

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3.3.3. Attend events.	are developed and shared. Attendance at targeted events.	Number of follow-up actions from events.	Address Theme Leads	FY21-Q4
Agency and/or Stakeholder	Activities Through FY19-Q4			
Address Theme and NAD Agency Representatives	3.3.2 Presented at the NSGIC annual conference, and at NGAC meetings. Attended events to promote the NAD: the NSGIC mid-year conference; the GIS-T Symposium, the National Postal Forum; and Urban and Regional Information Systems Association (URISA) GIS-Pro.			

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Appendix 2: National Address Database Status Map



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Appendix 1: Glossary of Terms and Acronyms

ACRONYM	FULL EXPRESSION
FGDC	Federal Geographic Data Committee
FTE	Full-time equivalent
FY	Fiscal Year
ISO	International Organization for Standardization
LMA	Lifecycle Maturity Assessment
MAF/TIGER	Master Address File/Topologically Integrated Geographic Encoding and Reference System
MOU	memorandum of understanding
MTDB	MAF/TIGER Database
NAD	National Address Database
NGDA	National Geospatial Data Asset
OMB	Office of Management and Budget
Q1, Q2, Q3, Q4	First, Second, Third, and Fourth Quarters of the Fiscal Year
TBD	to be determined
TIGER	Topologically Integrated Geographic Encoding and Reference System
USDOT	United States Department of Transportation